

PROGRAM ANNOUNCEMENT

THE DEPARTMENT OF DEFENSE (DoD)

Fiscal Year 2002

Instrumentation and Research Support for Hispanic Serving Institutions (HSIs)

**ARO Broad Agency Announcement
DAAD19-02-R-0010**

PROPOSAL DEADLINE:

**Proposals must be received no later than 4:00 p.m. Eastern Time
Wednesday, October 30, 2002**

**Issued by the U.S. Army Research Office
In cooperation with the
Office of the Director of Defense Research and Engineering (Basic Research)**

I. General Information

The Office of the Director of Defense Research and Engineering (Basic Research) announces the Fiscal Year 2002 competition for instrumentation and research support for Hispanic Serving Institutions (HSIs). This program aims to (a) enhance programs and capabilities at these institutions in scientific and engineering disciplines critical to the national security functions of DoD and (b) increase the number of graduates, including underrepresented minorities, in the fields of science, mathematics, and/or engineering. Thus, awards under this solicitation will be limited to HSIs having an accredited, degree-granting program in science, mathematics, and/or engineering.

Fiscal Year 2002 funds for this program are expected to total approximately \$ 4.2 million. These funds will fully support all awards made under this solicitation. Awards are expected to range from \$50,000 to \$400,000. Awards will be made by the Army Research Office (ARO) and will be based on merit competition. Evaluations will be conducted by Army scientists and engineers. Sufficient funds are not available to meet all instrumentation and research needs. Awards, therefore, will be made to institutions whose proposal(s) rank highest based on the evaluation factors listed in Section V.

1. Funding Opportunity Title: *Fiscal Year 2002 Department of Defense Instrumentation and Research Support for Hispanic Serving Institutions (HSIs)*

2. Program Name: *Department of Defense Program for Hispanic Serving Institutions (HSIs)*

3. Funding Opportunity Number: *ARO Broad Agency Announcement DAAD19-02-R-0010.*

4. Agency Name: This Department of Defense program will be administered through the Army Research Office (ARO) on behalf of the Office of the Director of Defense Research and Engineering (Basic Research) (ODDR&E).

5. Agency Contacts:

Army Research Office: Jenny W. Haire, 919-549-4205 (Primary)
Haire@aro.arl.army.mil

Dr. Vallen Emery, 301-394-3585 (Alternate)
Vemery@arl.army.mil

LTC David C. Camps, 919-549-4200 (Alternate)
Campsdc@aro.arl.army.mil

ODDR&E: Evelyn Kent, 703-696-0368
Evelyn.Kent@osd.mil

6. Instrument Type: Awards will be made by project grants.

7. Catalog of Federal Domestic Assistance (CFDA) Number: 12.630

8. CFDA Title: Basic, Applied, and Advanced Research in Science and Engineering

9. Address to Request Application Package: This announcement contains all material required for an application.

10. Intergovernmental Review: None

11. Other Information: None

II. Funding Opportunity Descriptions

A. Instrumentation Component: This announcement solicits proposals for the acquisition of instrumentation or equipment to enhance education and/or research programs in science, mathematics, and/or engineering. Emphasis is on instrumentation or equipment that will enhance the ability of the institution to improve the quality of education and to increase the number of students, including underrepresented minority students, in the fields of science, mathematics, or engineering and/or to perform research in areas of interest to the Army Research Office. See ARO research interest areas at <http://www.aro.army.mil>. (Select ‘Annual BAA’ or select ‘Funding Opportunities,’ then select ‘US Army Research Laboratory BAA# DAAD19-00-R-0010 and go to Part I.A.’)

Instrumentation grant awards will range from \$50,000 to \$400,000 (total cost to DoD) with a performance period of 12 months. One instrumentation proposal per institution is allowed. If more than one proposal is received from a given institution, that institution will be required to designate one proposal to compete under this announcement. This will help assure that each institution’s highest priority equipment needs get full consideration, it will reduce the cost of writing proposals, and it may enhance the number and range of institutions receiving awards.

Program funds will be used for the acquisition of instruments and/or equipment that will augment existing facilities, enhance curricula, or develop new laboratories, programs or capabilities in areas related to science, mathematics, or engineering education and/or research. This program is designed to provide basic science laboratory equipment as well as sophisticated instruments and computers, including hardware and software. Individual proposals may request funding for more than one instrument if the requested pieces comprise a “system” that is used for a common purpose.

The proposed equipment may be incorporated into other assistance programs that enhance science, mathematics, or engineering education and/or research. For example, if assistance from other sources (e.g., industry, state, etc.) exists or is contemplated, it should be discussed. Moreover, if assistance programs supported by federal agencies (e.g., National Science Foundation) are in place or planned, explain their relationship to your proposal.

B. Research Component: Proposals are solicited for basic research in areas of interest to the Army Research Office or other research areas important to national defense. ARO research interest areas are discussed in Part I.A. of the 'Annual BAA' available at <http://www.aro.army.mil>. Points of contact (i.e., program managers) are provided for each research area, including phone numbers and e-mail addresses. Principal Investigators are encouraged to contact ARO program managers to explore areas of mutual research interests. Research proposals may include funds to purchase capital equipment required to conduct the proposed research. This should be included in the first year budget plan.

Research may be conducted by a Principal Investigator working within a traditional single-institution environment or as a collaborative effort with one or more partners at other institutions. Collaborators may be at other educational institutions (not necessarily HSIs), a DoD laboratory or Research, Development, and Engineering Center (RDEC), a DoD University Affiliated Research Center (UARC), a nonprofit research institution, and/or an industry or small business.

Funds for research projects can be awarded only to a HSI. Subaward of funds from this program to a collaborating HSI is permitted, but any non-HSI research partners must support their activities with resources otherwise available to them. The Principal Investigator must be a faculty member (but not necessarily a US citizen) at the HSI receiving the grant. Any equipment acquired via this solicitation shall be vested with the awardee. Travel and per diem for the Principal Investigator, other participating faculty and students are appropriate budget items for collaborative research projects.

A discussion of collaborations, if any, should be included in the proposal. Provide name and location of the institution(s) involved, name and credentials of collaborating scientists, and coordination procedures that will be employed to assure the success of the project. Partners in the collaboration should describe their support of the project, including cost sharing where applicable, via a letter to the Principal Investigator. Such letter(s) should be included in the proposal package.

Investigators are encouraged to bring innovative approaches to collaborations with a view toward enhancing the ability of HSIs to develop strong science and engineering programs that will attract and retain good students. One of the purposes of this program is to allow HSI students to be exposed to DoD and other state-of-the-art research. Methods and means by which an HSI may develop research collaborations may be as varied as the number of schools submitting proposals. Factors such as geographical location, research capabilities, facilities and available equipment are unique to each institution. Therefore, DoD will not prescribe a specific structure for a collaborative project. Rather, each Principal Investigator is encouraged to be innovative and creative in designing a program that utilizes whatever resources are available.

An institution may submit more than one research proposal under this announcement. Research projects typically have a performance period of 36 months. Total cost to the DoD over the three-year period will not exceed \$400,000. Instrumentation necessary to carry out the proposed research should be budgeted in the first year.

III. Eligibility Information

1. Eligible Applicants: This competition is open only to Hispanic Serving Institutions (HSIs). This designation is covered under several Federal statutes. The HSIs are defined in section 316(b)(1) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b)(1)). Institutions that meet the criteria may be found on the minority institution list found at the Department of Education web site: <http://www.ed.gov/offices/OCR/minorityinst.html>.

The minority institutions list is compiled by the Office for Civil Rights, U.S. Department of Education using enrollment data reported by Postsecondary Institutions to the National Center for Integrated Statistics and the Office for Civil Rights in the Integrated Postsecondary Education Data System (IPEDS) Fall enrollment survey, formerly called the Higher Education General Information Survey (HEGIS).

Questions concerning the list must be directed to the IPEDS Inquiry Line (202- 205-9567) in the Office for Civil Rights, U.S. Department of Education, not to the Department of Defense.

Proposing schools need not be research institutions. However, they should have science, mathematics and/or engineering programs and a history of graduating students in one or more of these fields. Community or junior colleges responding to this announcement must demonstrate or establish a program in which the graduates will continue their studies toward a baccalaureate degree. The institution granting the baccalaureate degree need not be a minority institution or a Hispanic Serving Institution, but must formally agree to participate and to provide support to the community/junior college graduates as stipulated in the proposal.

By making awards for such educational programs, it is expected that the number of students, including underrepresented minority students, obtaining undergraduate and graduate degrees in the subject fields will increase. However, the recruitment and selection procedures of proposals accepted for an award must comply with Section 2000d of Title 42, United States Code, which provides: *No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.*

2. Cost Sharing: Cost sharing is not required.

3. Other: Section IV (Supporting Information) and Section V (Evaluation Criteria) provide guidance on proposal content and structure. Failure to address these topics will result in a low score and thus, a noncompetitive proposal.

IV. Application and Submission Information

1. Content and Form of Application: Proposals must be complete and self-contained to qualify for review. All proposals require the signed original and three (3) photocopies. The original should have the word "ORIGINAL" stamped or printed in the upper right corner.

Each proposal should be TYPED, 12-POINT, one-sided, on 8 ½ x 11-inch white paper, stapled in the upper left corner. Separate attachments such as institutional brochures will not be accepted. Plastic covers or binders should not be used.

Instrumentation proposals must not exceed 25 pages. Research proposals must not exceed 50 pages. The proposal cover (Appendix A) is required on all proposals and is not included in the page count.

Proposals must include the following:

Proposal Cover. Use the two page form provided (Appendix A).

Abstract. Provide a concise summary of the proposal. For an instrumentation proposal, describe the item(s) requested and the program enhancements that would be supported by such acquisition. For a research proposal, provide a description of the project as it relates to research interests of ARO (see Section II.A) and address specifically any equipment to be acquired.

Budget.

(a) **Equipment Proposal:** Include a budget that identifies equipment to be purchased, cost per item and total cost. Indicate the proposed source(s) of the equipment. Include the name and phone number of a contact at the source(s) or a web site address listing the equipment and price. All equipment being requested must be considered part of one “system” costing more than \$50,000. Installation cost of the equipment and cost of facility renovation to accommodate such equipment may be included in the budget. Also, contractor support for initial set up, calibration, and other operational assistance may be included in the budget. The cost of continued operation and maintenance must be met by normal support mechanisms and are not to be part of the equipment budget. Salaries and overhead are not appropriate for an equipment proposal.

(b) **Research Proposal:** Provide cost estimates sufficiently detailed for meaningful evaluation. Use an award start date of March 1, 2003. The budget should be broken down into periods beginning on March 1 of each year. A total amount for each of these periods should be shown as well as a total amount for the entire period of performance (three-year maximum). Any funds available from other sources (e.g., as cost sharing) should be shown in a separate column for each budget period. A subaward of funds provided under this solicitation to another HSI for collaborative research can be proposed; in such case, a similarly itemized budget for the proposed costs for the subaward must be included. Costs should be itemized as follows:

1. Salaries and Wages (list each employee category)
2. Employee Benefits (provide approved rate agreement)
3. Permanent Equipment Costs (majority in year 1; list items & source of price)
4. Expendable Supplies and Materials (list items)
5. Travel (list locations & purpose of travel)
6. Publication and Report Costs
7. Computer Costs (provide details)
8. Other Direct Costs (list items)
9. Indirect Costs (provide approved rate agreement)

Supporting Information

(a) **Instrumentation Proposal**: Describe how the proposed instrumentation will (1) enhance the quality of academic programs, particularly in science, mathematics, or engineering and, (2) indicate the educational departments and other groups within or outside the institution that will use the instrumentation, as well as any other programs that will benefit from its use.

The proposal should explain how the new equipment would be used. For example, describe how it would enhance the quality of academic programs, particularly in areas of science, mathematics, or engineering, and how it would interface with existing equipment, if applicable. Any existing or planned mentoring programs or other after-hours educational activities should be discussed, as well as any educational outreach plans that involve high school students and/or high school teachers.

Describe any special circumstances regarding the acquisition or installation of new equipment. For example, does the facility require improved electrical or plumbing service to accommodate the new equipment? If so, these improvements should be budgeted.

Indicate the estimated useful life of the equipment and describe the plan to service and maintain it, including source(s) of funds.

Indicate if faculty members will require training for optimum use of proposed instrumentation. If so, this should be budgeted. Funds for extramural technical assistance may also be requested.

Include curriculum vitae for the Principal Investigator and other key personnel.

(b) **Research Proposal Involving Equipment Acquisition**: Describe how the proposed equipment will (1) enhance the quality of research and research-related education in science, mathematics, or engineering and/or (2) establish new research capabilities or enhance current research capabilities for performing research in areas of interest to the DoD.

All awards require certifications of compliance with national policy requirements. Statutes and government wide regulations require some certifications to be submitted at the time of proposal submission rather than at the time of award. Proposers, by signing and submitting a proposal and the required cover, Appendix A, are providing the certification at Appendix A to 32 CFR Part 25 regarding debarment, suspension, and other matters; the certification at Appendix C to 32 CFR Part 25 regarding drug-free workplace; and the certification at Appendix A to 32 CFR Part 28 regarding lobbying. Full text of these certifications may be found at <http://afosr.af.mil/pdfs/March2000assistancecerts1.pdf>. Copies will be provided upon request.

2. Submission Date and Time. Proposals must be received no later than 4:00 p.m. Eastern Time on Wednesday, October 30, 2002.

The offeror is responsible for submitting the proposal to reach the Army Research Office no later than the stated date and time. Any proposal arriving after the deadline is “late” and will not be considered for an award, except for the following:

(a) There is acceptable evidence that the properly addressed proposal was delivered to the Army Research Office by the deadline; or

(b) The properly addressed proposal was sent by U.S. Postal Service Express Mail prior to **October 26, 2002**. The term “business days” excludes weekends and U.S. federal holidays.

In case the operation of the Army Research Office is interrupted and the office is unable to receive the proposal, the deadline is extended to the same time of the first day when the office is in operation.

Please note that proposals delivered by commercial carriers are considered “hand carried” and that no exceptions can be made to allow such proposals to be considered if, for any reason, they are received after the deadline. Offerors are advised that some proposals responding to past announcements that were sent via commercial carriers were delayed during shipment and arrived after the deadlines, typically by one or two days. To decrease the probability that proposals delivered by commercial carriers will arrive after the deadline and thus be ineligible to compete, offers are encouraged to schedule delivery to occur before the deadline date.

To obtain acknowledgment that your proposal was received at ARO, please use the form at Appendix B. Self-address the form, affix proper postage, and clip it to original of the proposal (please do not use tape or staples).

3. Other Submission Requirements – All proposals must be sent to the Army Research Office. Please note the following special instructions:

Use the post office box for delivery by U.S. Postal Service:

Army Research Office
ATTN: AMSRL-RO-RT (HSI 2002)
P.O. Box 12211
Research Triangle Park, NC 27709-2211

Use the street address for delivery by commercial carrier (e.g., Federal Express, etc):

Army Research Office
ATTN: AMSRL-RO-RT (HSI 2002)
4300 South Miami Boulevard
Durham, NC 27703-9142

Point of Contact at delivery site: Jenny Haire, 919-549-4205

Proposals submitted in whole or in part by electronic media (computer disk or tape, facsimile machine, electronic mail, etc.) will not be accepted.

V. Application Review Information

1. Evaluation Criteria (Equipment Proposals)

The primary evaluation criteria, of equal importance, are:

- a. The impact of requested equipment on the science, engineering and/or mathematics educational programs of the institution;
- b. The impact on students and the number of students who will use the equipment or will benefit from its use in the science, engineering and/or mathematics curricula;
- c. Degree to which the requested instrumentation will interface with or upgrade other programs and instruments and the impact relative to current capabilities;
- d. Qualifications of the faculty to carry out the educational program, including the use and maintenance of the instrumentation proposed for purchase;
- e. Realism and reasonableness of cost. Cost sharing is not an evaluation factor.

2. Evaluation Criteria (Research Proposals)

Research proposals will be evaluated using the following criteria. The primary evaluation criteria (of equal importance) are:

- a. Scientific and technical merits of the proposed research.
- b. Potential contributions of the proposed research to the defense mission of the Army Research Office.
- c. Likelihood of the proposed research to develop new research capabilities or enhance existing research capabilities and to broaden the university research base in support of national defense, and the potential to contribute to the education of future scientists and engineers in disciplines critical to the DoD mission.

Other evaluation criteria (of less importance than 1, 2, and 3, but of equal importance to each other) are:

- d. The qualifications, capabilities, experience, and past research accomplishments of the Principal Investigator and other key personnel who are critical to achieving the objectives of the proposal.

e. The expected impact of the proposed involvement of and interaction with DoD or other federal laboratories, industry, or other existing research centers of excellence.

f. Budgetary realism and cost effectiveness of the proposal. Cost sharing is not an evaluation factor.

3. Review and Selection Process – Proposals will undergo a multi-stage evaluation process at the Army Research Office. An evaluation panel comprised of program managers and technical area experts will review each proposal and rank it according to above criteria. The most meritorious proposals will undergo further review by the evaluation panel, after which a list of finalists will be compiled and recommended for the approval of the Deputy Director of Defense Research and Engineering (Basic Research).

4. Anticipated Announcement and Award Dates – Initial announcement of selectees will be made by the DoD Public Affairs Office at <http://www.defenselink.mil/news/releases.html> on/or about 6 January 2003 (search by title). Awards are expected to be in place by March 1, 2003. This date should be cited as the start date of the proposal performance period and the associated budget.

VI. Award Administration Information

1. Award Notices: After the News Release, ARO will send a notification letter and/or e-mail to successful Principal Investigators after which Army procurement personnel will contact the university business office to initiate award negotiations.

2. Administrative Requirements: In keeping with the provisions of 32 U.S.C. 6306 and with the intent of this program to increase university capabilities in science, mathematics, and engineering education and research, title to equipment acquired under this solicitation will be vested with the university without further obligation to the government. Additional information about ARO administrative requirements is available on-line at <http://www.aro.army.mil/research/terms99.htm>.

3. PAYMENT BY ELECTRONIC FUND TRANSFER – CENTRAL CONTRACTOR REGISTRATION DATABASE (CCR): All payments by the Government under any award resulting from this BAA shall be made by electronic funds transfer (EFT). **PLEASE NOTE: Before ARO can make an award under this announcement, the awardee (i.e., the college or university) must be registered in the DoD CCR database. Proposers should verify with their business office that this has been done. To register in the DoD CCR database, go to <http://www.CCR2000.com> or call (800) 227-2423 for assistance.**

4. Reporting: a. An instrumentation grant requires a report 90 days after end of performance period using Standard Form 269 (SF-269) or Standard Form 272 (SF-272) as required by Part 32 of the DoD Grant and Agreement Regulations (32 CFR part 32). The report should indicate fulfillment of the proposed objective by the acquisition and use of the instrumentation.

b. A research grant requires more comprehensive reporting. Reporting requirements are governed by 'ARO Terms and Conditions,' incorporated herein by reference and available electronically at <http://www.aro.army.mil/index.htm>. The web site provides complete details (See 'Reporting Instructions' (ARO Form 18). If the grantee does not have access to the Internet, copies of ARO Form 18 are available by calling the ARO Information Line at 919-549-4375.

APPENDIX A: PROPOSAL COVER

**Submitted to FY02 DoD Instrumentation and Research Support Program
for Hispanic-Serving Institutions (HSI)
ARO Broad Agency Announcement No. DAAD19-02-R-0010, dated August 2002**

____ INSTRUMENTATION only
____ RESEARCH

Proposal Number _____
(to be completed by DoD)

(Check one)

1. THE PRINCIPAL INVESTIGATOR (one name only):

(Title) (First Name) (MI) (Last Name) (Signature)

(Phone number, including Area Code) (Fax Number) (E-mail address)

(Organization)

(Department/Division)

(Street/ P.O. Box)

(City) (State) (Zip Code)

CURRENT DoD CONTRACTOR OR GRANTEE: YES ____ NO ____ If yes, give Agency Name,
Contract/Grant Number, Point of Contact, Phone Number:

2. THE PROPOSAL

TITLE OF PROPOSAL *(Be brief and descriptive; use key words suitable for indexing and retrieval; avoid
acronyms and mathematical or scientific notation.)*

Total Funds Requested from DoD

Proposed Start Date
(Month/Day/Year)

Proposed End Date
(Month/Day/Year)

3. CERTIFICATIONS: By signing and submitting this proposal, the proposer is providing the certification at Appendix A to 32 CFR Part 25 regarding debarment, suspension, and other matters; the certification at Appendix C to 32 CFR Part 25 regarding drug-free workplace; and the certification at Appendix A to 32 CFR Part 28 regarding lobbying.

4. THE INSTITUTION:

NAME AND ADDRESS OF UNIVERSITY OFFICIAL AUTHORIZED TO OBLIGATE CONTRACTUALLY
(Note: Negotiation and award processes usually can be completed more quickly if the individual named below is a financial officer of the institution.)

(Title) (First Name) (MI) (Last Name) (Phone Number, Including Area Code)

Name of Grantee (University) (Fax Number)

Street Address (P.O. Box Numbers Cannot Be Accepted) (E-mail Address)

(City) (State) (Zip Code)

DUNS + 4 No.¹ _____

Signature of Authorized University Official

¹ The institution's number in the data university numbering system or DUNS+4 is a unique 13-character identification number for organizations and subsidiaries. Dun & Bradstreet Corporation assigns these numbers. You can receive a DUNS+4 number by calling Dun & Bradstreet at 1-800-333-0505 or go to the Dun & Bradstreet web site at <http://www.dnb.com/>. To facilitate payment under any award, the institution must be registered in the Central Contract Registry (CCR). CCR uses the DUNS+4 as a unique identifier for each organization. Information on registering in the CCR may be found at <http://www.ccr2000.com/> or 1-888-227-2423.

APPENDIX B: ACKNOWLEDGMENT RECEIPT

U.S. Army Research Office
ATTN: AMSRL-RO-RT (HSI)
P.O. Box 12211
Research Triangle Park, NC 27709-2211

POSTAGE

[Proposing Institution must affix mailing
label for Principal Investigator plus Postage]

Fold on this line and clip to Proposal Cover Page

Date:

Dear Proposer:

The proposal that you submitted to the Army Research Office for the Fiscal Year 2002 Department of Defense Instrumentation and Research Program for Hispanic-Serving Institutions has been received.

____ Your proposal has been assigned Control No. _____ and will be evaluated. Please reference this number when inquiring about your proposal.

____ Your proposal will not be evaluated for the following reason(s):

Announcement of Selectees is expected on/about January 6, 2003
via DoD News Release posted at <http://www.defenselink.mil/news/releases.html> after which
ARO will notify each Principal Investigator by letter and/or e-mail.